

What is claimed is:

1. A method for operating a cooperative computer system comprising the steps of
interconnecting a plurality of computers along at least one networking interconnection,
executing at a local computer a received computer program from a foreign computer when the local computer has capacity to execute said received program based upon local computer operating requirements, and
returning to the foreign computer required information regarding execution of the foreign computer program.
2. The method of claim 1 further comprising the step of
executing said foreign computer program only when the effect on a local user is minimal.
3. The method of claim 2 further comprising the steps of
interrupting execution of said foreign computer program to respond to a local user requirement.
4. The method of claim 3 further comprising the step of
returning to the foreign computer, after said interruption, sufficient data and context information for continuing execution of said interrupted foreign program on a computer other than the local computer.

5. The method of claim 2 further comprising the step of adjusting priorities in a multitasking environment at the local computer for minimizing the effect on the local user.

6. A method for operating a cooperative computer system comprising the steps of

interconnecting a plurality of computers along at least one networking interconnection,

executing at a local computer a received computer program from a foreign computer when the local computer has capacity to execute said received program based upon local computer operating requirements and when the effect on a local user is minimal, and

interrupting execution of said foreign computer program when necessary to respond to a local user requirement,

returning to the foreign computer, after said interruption, sufficient data and context information for continuing execution of said interrupted foreign program on a computer other than the local computer, and

returning to the foreign computer, when there is no interruption, required information regarding execution of the foreign computer program.

7. The method of claim 6 further comprising the step of adjusting priorities in a multitasking environment at the local computer for minimizing the effect on the local user.

8. An apparatus for operating a cooperative computer system comprising

means for interconnecting a plurality of computers along at least one networking interconnection,

means for executing at a local computer a received computer program from a foreign computer when the local computer has capacity to execute said received program based upon local computer operating requirements, and

means for returning to the foreign computer required information regarding execution of the foreign computer program.

9. The apparatus of claim 8 further comprising

means for executing said foreign computer program only when the effect on a local user is minimal.

10. The apparatus of claim 9 further comprising

means for interrupting execution of said foreign computer program to respond to a local user requirement.

11. The apparatus of claim 10 further comprising

means for returning to the foreign computer, after said interruption, sufficient data and context information for continuing execution of said interrupted foreign program on a computer other than the local computer.

12. The apparatus of claim 9 wherein said interconnecting means comprises a fiber optic network.

13. The apparatus of claim 12 wherein said network operates according to a token passing protocol.

14. An apparatus for operating a cooperative computer system comprising

means for interconnecting a plurality of computers along at least one networking interconnection,

means for executing at a local computer a computer program received from a foreign computer when the local computer has capacity to execute said received program based upon local computer operating requirements and when the effect on a local user is minimal,

means for interrupting execution of said foreign computer program to respond to a local user requirement,

means for returning to the foreign computer, after said interruption, sufficient data and context information for continuing execution of said interrupted foreign program on a computer other than the local computer, and

means for returning to the foreign computer, when there is no interruption, required information regarding execution of the foreign computer program.